PATENT COOPERATION TREATY

DATE ENTERED	44/65
DATE DUE	44/05+4/10/65
INITIALLED	M.
HORL	EY

From the INTERNATIONAL SEARCHING AUTHORITY	DAT
To:	HCHORLEY
FRY HEATH & SPENCE LLP Attn. Downing, Michael Philip The Gables Massetts Road Horley, Surrey RH6 7DQ UNITED KINGDOM O 4 JUL 200	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION 5
HORLE	(PCT Rule 44.1)
	Date of mailing (day/month/year) 04/07/2005
Applicant's or agent's file reference	
P51380D WO	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No.	International filing date
PCT/GB2004/004712	(day/month/year) 08/11/2004
Applicant.	
PLUS DESIGN LIMITED	
1. X The applicant is hereby notified that the international search	report and the written opinion of the International Searching

 Authority have been established and are transmitted herewith.
Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):
When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the

International Search Report; however, for more details, see the notes on the accompanying sheet.

International Bureau of WIPO, 34 chemin des Colombettes Where? Directly to the 1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an International preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months. from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry Into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site.

Name and malling address of the International Searching Authority	Authorized officer
European Patent Office, P.B. 5818 Patentiaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Carina Bergström

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively:

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international positions. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

Whom?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been its filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

Notes to Form PCT/ISA/220 (first sheet) (January 1994)

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged:
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- 1. [Where originally there were 48 claims and after amendment of some claims there are 51]: "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- 2. [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:

Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added. or *Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged.*

4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rute 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

Notes to Form PCT/ISA/220 (second sheet) (January 1994)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P51380D WO	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.		
International application No.	International filing date (day/month	(Year) (Earliest) Priority Date (day/month/year)		
PCT/GB2004/004712 08/11/2004 07/11/2003				
Applicant PLUS DESIGN LIMITED				
according to Article 18. A copy is being	transmitted to the International Bureau			
This International Search Report consist X It is also accompanied to	ts of a total of she by a copy of each prior art document ci			
language in which it was filed, u	nless otherwise indicated under this ite			
this Authority (F	Rüle 23.1(b)).	of a translation of the international application furnished to disclosed in the international application, see Box No. I.		
	und unsearchable (See Box II).			
3. Unity of invention is la	icking (see Box III).			
4. With regard to the title,				
X the text is approved as	submitted by the applicant.			
the text has been estab	lished by this Authority to read as follow	vs:		
5. With regard to the abstract,				
	submitted by the applicant.			
the text has been estab	lished, according to Rule 38.2(b), by the	is Authority as it appears in Box No. IV. The applicant ional search report, submit comments to this Authority.		
6. With regard to the drawings,				
a. the figure of the drawings to be	published with the abstract Is Figure I	No2		
X as suggested b	y the applicant.			
as selected by	this Authority, because the applicant fa	iled to suggest a figure.		
	this Authority, because this figure bette	r characterizes the Invention.		
b none of the figures is to	be published with the abstract.			

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2004/004712

			1017 4020047 0047	L &	
IPC 7	FICATION OF SUBJECT MATTER H03K7/06 G01V11/00				
According to	International Patent Classification (IPC) or to both national classifi	anilan mad 180			
	SEARCHED	cation and IPC			
	cumentation searched (classification system followed by classification system)	lion symbols)			
IPC 7	H03K G01V	ion dyniods)			
Documentat	ion searched other than minimum documentation to the extent that	such documents similari	udail in the fields exampled		
		Socii Cocciiionis ale liigii			
Electronic da	ata base consulted during the international search (name of data b	ase and, where practical	, search terms used)		
EPO-Int	ternal				
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT				
Category •	Citation of document, with indication, where appropriate, of the re-	lavant nassance	- Data	vont to plain No	
• • •	The second appropriate, or the second	sovem passages	neæ	vant to claim No.	
A	EP 0 697 773 A (FLEETWOOD FURNIT	IIRF	1	2 7	
	COMPANY, INC; FLEETWOOD GROUP, I		1-7	27	
;	21 February 1996 (1996-02-21)	,	1		
	column 14, line 47 - column 16,	line 22			
Α	IIC A SEE SID A (DELATOURG ET AL)				
^	US 4 355 310 A (BELAIGUES ET AL) 19 October 1982 (1982-10-19)		1-2	27	
·	column 5, line 35 - column 7, li	no 12			
	column 12, line 54 - column 13,				
,		Title 20			
			1		
Furth	er documents are listed in the continuation of box C.	V Patent familiy n	nembers are listed in annex.		
		A Takem taking t		·	
	legories of cited documents :	*T* later document pub	ished after the International filir	ng date	
"A" docume: conside	nt defining the general state of the ert which is not ered to be of particular relevance	cited to understan	d not in conflict with the applicated the principle or theory underly	lion but ring the	
	ocument but published on or after the international	invention "X" document of particu	lar relevance; the claimed inve	ntion	
'L' documer	nt which may throw doubts on priority claim(s) or	cannot be conside	red novel or cannot be consider	red to	
which is cited to establish the publication date of another citation or other special mason (as specified) "Y" document of particular relevance; the claimed invention					
O document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu-					
*P! document published prior to the International filing date but in the art.					
	tater than the priority date claimed '8' document member of the same patent family				
Date of the actual completion of the international search Date of mailing of the international search report					
23	23 June 2005 04/07/2005				
Name and m	nailing address of the ISA	Authorized officer			
	European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk				
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Pham, P			
		1			

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 28

Claim 28 includes the expression "substantially as describes herein with reference to and/or as illustrated in the accompanying figures" Therefore, claim 28 does not fulfil the requirement of Rule 6.2(a) PCT.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

International application No. PCT/GB2004/004712

INTERNATIONAL SEARCH REPORT

box ii Coservations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X Claims Nos.: 28 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: See FURTHER INFORMATION sheet PCT/ISA/210.
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the Invention first mentioned in the claims; It is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No
PCT/GB2004/004712

	nt document search report		Publication date	A.	Patent family member(s)	Publication date
EP 0	697773	A	21-02-1996	US DE DE DE EP	5724357 A 69528126 D1 69528126 T2 697773 T1 0697773 A2	03-03-1998 17-10-2002 30-04-2003 25-01-2001 21-02-1996
				ŪS	6021119 A	01-02-2000
US 4	355310	A	19-10-1982	FR AT AU BRADKGSBRENT JP MKL	2379694 A1 379691 B 67778 A 511109 B2 3247578 A 7800625 A 1106022 A1 2803059 A1 49278 A 13157 A 466101 A1 1597627 A 64456 A1 45960 B1 149902 A1 1092376 B 1408802 C 53097346 A 62014880 B 143915 A 7801178 A	31-10-1980 16-10-1978 09-09-1981 24-03-1980 12-01-1983 29-05-1982 12-07-1985 24-11-1987 25-08-1978 04-04-1987 31-07-1981 07-08-1978
				NO NZ OA	186376 A 5870 A	B, 04-08-1978 23-02-1982 31-05-1981
				PT SU TR ZA	67604 A , 1087082 A3 20094 A 7800466 A	B 01-03-1978 15-04-1984 08-07-1980 27-12-1978

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY To: PCT WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/GB2004/004712 08.11.2004 07.11.2003 International Patent Classification (IPC) or both national classification and IPC H03K7/06, G01V11/00 **Applicant** PLUS DESIGN LIMITED This opinion contains indications relating to the following items: ☑ Box No. I Basis of the opinion ☐ Box No. II Priority. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☑ Box No. III ☐ Box No. IV Lack of unity of invention ☑ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application 2. **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016

Pham, P

Authorized Officer

Telephone No. +31 70 340-3851



10/578463 IAP20Rec'd PSTATO U8 MAY 2006

International application No.

PCT/GB2004/004712

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Box No. I Basis of the opinion 1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)). 2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of: a. type of material: a sequence listing table(s) related to the sequence listing b. format of material: in written format in computer readable form c. time of filing/furnishing: contained in the international application as filed. filed together with the international application in computer readable form.

In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

furnished subsequently to this Authority for the purposes of search.

4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/004712

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:					
	the entire international application,				
\boxtimes	claims Nos. 28				
because:					
	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):				
	the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):				
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.				
\boxtimes	no international search report has been established for the whole application or for said claims Nos. 28				
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:				
	the written form		has not been furnished		
			does not comply with the standard		
	the computer readable form		has not been furnished		
			does not comply with the standard		
- 🗆	the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.				
	See separate sheet for further details				

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/004712

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-27

No: Claims

Inventive step (IS)

Yes: Claims

1-27

No: Claims

Industrial applicability (IA)

Yes: Claims

1-27

No: Claims

2. Citations and explanations

see separate sheet

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/GB2004/004712

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claim 28 includes the expression "substantially as describes herein with reference to and/or as illustrated in the accompanying figures". Therefore, claim 28 does not fulfil the requirement of Rule 6.2(a) PCT.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document:

D1: EP 0 697 773 A

2. Document **D1**, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):

An electrical signalling system, comprising:

a modulator (22, 24), arranged to accept information and produce an alternating signal containing repeated rising and falling edges in which the information is encoded, the encoding being by way of the time between consecutive rising or consecutive falling edges (figures 1 & 3; column 9, lines 44 - 48; column 14, line 47 - column 15, line 22);

a transmission path for the signal from the modulator (22, 24) to a demodulator (22, 24) (figure 1; column 9, lines 44 - 52).

The subject-matter of claim 1 differs from this known electrical signalling system in that:

the demodulator is arranged to detect the signal edge and store a record of the signal around that edge, and to compare a subsequent part of the signal with that record thereby to detect a like edge and detect the time difference between like edges.

The problem to be solved by the present invention may be regarded as to determine

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/GB2004/004712

the time delay between consecutive edges without detecting the precise positions of the edges.

This problem and the corresponding solution was not disclosed in the available prior art. Therefore, the subject-matter of claim 1 appears to be new (Article 33(2) PCT) and inventive (Article 33(3) PCT).

3. Claims 2 - 27 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.